



# UNITED STATES PATENT AND TRADEMARK OFFICE

*cen*

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,263	01/26/2004	Richard E. Jesmonth	021384.0101PTUS	6446
32042	7590	07/31/2007		
PATTON BOGGS LLP 8484 WESTPARK DRIVE SUITE 900 MCLEAN, VA 22102			EXAMINER SAINT SURIN, JACQUES M	
			ART UNIT 2856	PAPER NUMBER
			MAIL DATE 07/31/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/763,263

Applicant(s)

JESMONTH, RICHARD E.

Examiner

Jacques M. Saint-Surin

Art Unit

2856

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 May 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-13, 23 and 28-33 is/are allowed.
- 6) ☒ Claim(s) 14-22 and 24-27 and 34-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 3/07.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Amendment***

1. This Office Action is responsive to the amendment of 05/10/07.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1-36 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 102***

4. Claims 14-15, 20-22 and 24-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Townley-Smith (US 2005/0077455 A1).

Regarding claims 14 and 24, Townley-Smith discloses a system (100) for mapping a condition of a structure comprising comprising: a computer processor (126) having a memory; a position locating system (104) for determining the position of a marker in a frame of reference and communicating said position to said computer processor (104); a density sensor (120) in communication with said computer processor (126); and a marker associated with said density sensor (the data processor 126 may show a marker on the map indicating the location or locations where intruders are detected, see: paragraph 0041).

Regarding claims 15 and 25, Townley-Smith discloses a plurality of receivers (a method of deploying sensors that includes deploying multiple fiber optic sensors in an area, each the fiber optic sensor including a filter and a sensing fiber that is sensitive to

stress, the filter allowing only light signals having a particular wavelength to be coupled to the sensing fiber to allow that sensor to generate an output signal having the particular wavelength (see: paragraph 0023).

Regarding claim 20-22, Townley-Smith discloses the data processor 126 uses information from a database 128 that includes a table 134 having information about a mapping between the location of each sensor 104 (including location of the corresponding sensing fiber or fibers 108) and the wavelength used by the sensor 104. For example, when there is a change in the output signal from one of the detectors 120, where the return signal has a wavelength  $\lambda_i$ , the data processor 126 determines the location of the perturbed sensing fiber based on the table 134. Townley-Smith further discloses Each sensor 104 may have more than one sensing fiber 108. The interference signal generated by a sensor 104 may be based on an interference of more than two signals. The coupler 64 may couple more than two signals, so that signals traveling more than two signal paths can be coupled to generate the interference signal (see: paragraph 0079).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2856

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 16-19 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Townley-Smith (US 2005/0077455 A1) in view of McEwan (US Patent 5,361,070).

Regarding claims 16-18 and 27, Townley-Smith does not disclose ultrawideband receivers and ultrawideband transmitter. McEwan discloses UWB pulse echo system 54, UWB detector 40 and UWB receiver 27. McEwan further discloses the WB transmit spectrum is the Fourier transform of the emitted pulse and generally spans hundreds of megaHertz to several gigaHertz. It is inherently spread-spectrum (col. 1, lines 65-68). It would have been obvious to one having ordinary skill in the art at the time of the invention to utilize in Townley-Smith the UWB receivers and transmitter of McEwan because UWB motion sensor electronics may also be connected to electro-optical transducers, such as light emitting diodes and PIN photodiodes to project the detection shell optically and this would be particularly useful where pencil beam sensing, i.e., "light saber" operation is desired.

Art Unit: 2856

8. Claims 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Townley-Smith (US 2005/0077455 A1) in view of Ellis (US Patent 5,721,540).

Regarding claims 34-36, Townley-Smith does not disclose a global positioning system. Ellis discloses a global positioning system receiver for obtaining time and position information from a satellite (see: col. 2, lines 3-4). It would have been obvious to one having ordinary skill in the art at the time of the invention to utilize in Townley-Smith the GPS of Ellis because it includes a microprocessor having means for accepting data from said global positioning system receiver and for controlling said time measurement system and a position log memory for retaining time and position data thereby making the above combination more effective.

***Allowable Subject Matter***

9. Claims 1-13, 23 and 28-33 are allowable over the prior art of record.

***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacques M. Saint-Surin whose telephone number is (571) 272-2206. The examiner can normally be reached on Mondays to Fridays between 10:30 A.M and 800 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2856

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Jacques M. Saint-Surin  
July 22, 2007